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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/643,682 | 08/18/2003 | Mitsuhiko Yamamoto | 03481/LH | 4603 |
| 1933 7590 02/09/2007 FRISHAUF, HOLTZ, GOODMAN & CHICK, PC 220 Fifth Avenue 16TH Floor NEW YORK, NY 10001-7708 | | | EXAMINER | |
| | | | SMITH, NICHOLAS A | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1742 | |
| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE | | |
| 3 MONTHS | 02/09/2007 | PAPER | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| Office Action Summary | Application No. | Applicant(s) | |
|------------------------------|-------------------------------|---------------------|--|
| | 10/643,682 | YAMAMOTO ET AL. | |
| | Examiner Nicholas A. Smith | Art Unit 1742 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 30 November 2006.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1,2,4-7,9,10,13,25,27,36 and 37 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1,2,4-7,9,10,13,25,27,36 and 37 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date .
4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. ____ .
5) Notice of Informal Patent Application
6) Other: _____

DETAILED ACTION

Status of Claims

1. Claims 1-2, 4-7, 9-10, 13, 25 and 27 remain for examination. Claims 36-37 are new. Claims 30-35 have been withdrawn from consideration.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2, 4-7, 9-10, 13, 25, 27 and 36-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wei (US 5,350,564) in view of Yokoyama et al. (US Patent 6,294,467).

4. Wei is applied to the claims as stated in pp. 2-3 of the previous office action.

5. In regards to claims 1 and 5 amended features "and a positive electrode," "the positive electrode and" and "the cathode and the positive electrode," Wei does not specifically disclose a positive electrode that is separate from a material.

6. Yokoyama et al. pertains to reducing metal oxide films in manufacturing of patterned devices. Yokoyama et al. teaches use of a plate electrode (Fig. 1(c), col. 5, line 48 to col. 6, line 3) for reduction of a metal oxide film. It would have been obvious to one of ordinary skill in the art to substitute Wei's method of metal oxide film reduction via application of secondary, pattern metal as an anode with Yokoyama et al.'s method

of metal oxide film reduction via application of a separate plate as an anode in order to reduce the metal oxide film (Yokoyama et al., Fig. 1(c), col. 5, line 48 to col. 6, line 3).

7. In regards to claims 1 and 5 amended feature "wherein a portion of the first metal film on said material is dipped in to the acidic reduction treatment solution," Wei discloses a method wherein a portion of the first metal film on a material is dipped in to an acidic reduction treatment solution (col. 3, lines 19-51). It is noted that a portion (x) can range from $0\% < x \leq 100\%$.

8. In regards to claim 4 amended feature "chloride," Wei disclose such a feature (col. 3, lines 19-51).

9. In regards to claims 6, 9, 10, 13 and 27 change in dependency, Wei in view of Yokoyama et al. teaches the claims as stated above in paragraphs 4-8.

10. In regards to claim 36, Wei discloses wherein passivated layer is an oxide layer (col. 3, lines 33-36).

11. In regards to claim 37, see paragraph 6 above.

Response to Arguments

12. Applicant's arguments with respect to claims 1-2, 4-7, 9-10, 13, 25, 27 and 36-37 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

14. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas A. Smith whose telephone number is (571)-272-8760. The examiner can normally be reached on 8:30 AM to 5:00 PM, Monday through Friday.

16. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571)-272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

17. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NAS